

AMENDMENTS TO THE SPECIFICATION

Please replace the first paragraph bridging pages 10-11 with the following amended paragraph:

Fig. 1 is a block diagram showing the structure of a resonance frequency detecting device according to a first embodiment of the invention. Fig. 2 is a block diagram showing a structure according to a second embodiment of the invention. Fig. 3 is a block diagram showing a structure according to a third embodiment of the invention. Fig. 4 is a block diagram showing a structure according to a fourth embodiment of the invention. Fig. 5 is a block diagram showing a structure according to a fifth embodiment of the invention. Fig. 6 is a block diagram showing a structure according to a sixth embodiment of the invention. Fig. 7 is a block diagram showing a structure according to a seventh embodiment of the invention. Fig. 8 is a block diagram showing a structure according to an eighth embodiment of the invention. Fig. 9 is a block diagram showing a structure obtained after setting a filter in the seventh and eighth embodiments of the present invention~~according to a ninth embodiment of the invention~~. Fig. 10 is a block diagram showing a structure according to a ninth embodiment of the invention~~time waveform diagram for a command signal generated by a command generator~~. Fig. 11 is a time waveform diagram for a command signal generated by a command generator~~graph showing a relationship between a frequency of a sweep sine wave and a time to which the invention is applied~~. Fig. 12 is a graph showing a relationship between a frequency of a sweep sine wave and a time to which the invention is applied~~block diagram showing a structure according to a tenth embodiment of the invention~~. Fig. 13 is a block diagram showing a structure according to a tenth embodiment of the invention~~obtained after setting a filter~~. Fig. 14 is a block diagram showing the structure of an electric motor control system to which the conventional art is applied.

Please replace the sixth paragraph on page 15 with the following amended paragraph:

When the switches ~~152 and 153~~151 and 152 are on, the response signals S2 and S3 are input to the signal processor 61.

Please delete the sub-head “seventh embodiment” on line 23 of page 18.

Please delete the sub-head “eighth embodiment” on line 10 of page 20.

Please delete the sub-head “ninth embodiment” on line 6 of page 23.

Please delete the sub-head “tenth embodiment” on line 18 of page 24.